or reactive metals. The identity and quantity of any additive will depend on the desired properties or performance criteria of both the cementitious layer **22** as well as the sheathing or trim product made therefrom.

Organic binders are simply polymers that when added to water under certain conditions form long chains that intertwine and capture the components of the mixture. As water is removed from the mixture, these long chains solidify and bind the structural matrix. Because of the nature of these organic binders, however, they also function to modify the rheology of a composition. Whether the organic material is a binder, or primarily affects the rheology is a matter of degree and is dependent on the concentration. In smaller amounts the organic material primarily affects the rheology. As the amount of organic material is increased, its ability to bind the particles together increases, although it also continues to affect the rheology.

Organic binders can also be added to increase the cohesive strength, "plastic-like" behavior, and the ability of the mixture to retain its shape when molded or extruded. They act as thickeners and increase the yield stress of the inorganically filled mixture, which is the amount of force necessary to deform the mixture. This creates high "green strength" in the molded or extruded product. Suitable organic binders include a variety of cellulose-, starch-, and protein-based materials (which are generally highly polar), all of which assist in bridging the individual particles together.

Dispersants, on the other hand, act to decrease the viscosity and the yield stress of the mixture by dispersing the individual aggregates **25**, fibers **24**, and binding particles. This allows for the use of less water while maintaining adequate levels of workability. Suitable dispersants include any material which can be absorbed onto the surface of the binder particles or aggregates and which act to disperse the particles, usually by creating a charged area on the particle surface or in the near colloid double layer. The binders and dispersants can be introduced in the dry mixing step **210**, slurry forming step **212** and/or sprayed between layers **204** by a spray head **208** onto the accumulator roll **202**, for example.

It may be preferable to include one or more aggregate materials within the cementitious layer **22** in order to add bulk and decrease the cost of the mixture. Aggregates often impart significant strength properties and improve workability. An example of one such aggregate is ordinary silica sand or clay, which are completely environmentally safe, extremely inexpensive, and essentially inexhaustible.

In other cases, lightweight aggregates can be added to yield a lighter, and often more insulating, final product. Examples of lightweight aggregates are perlite, vermiculite, hollow glass spheres, aerogel, xerogel, pumice, and other lightweight rocklike materials. These aggregates are likewise environmentally neutral and relatively inexpensive.

Fibers may be added to the cementitious layer **22** in order to increase the interlaminar bond strength, compressive, tensile, flexural, and cohesive strengths of the wet material as well as the hardened articles made therefrom. Fiber should preferably have high tear and burst strengths (i.e., high tensile strength), examples of which include waste paper pulp, abaca, southern pine, hardwood, flax, bagasse (sugar cane fiber), cotton, and hemp. Fibers with a high aspect ratio of about 10 or greater work best in imparting strength and toughness to the moldable material.

From the foregoing, it can be realized that this invention provides reinforced cementitious sheathing products which are lighter in weight and more resistant to cracking than currently available commercial fiber cement products. The preferred corner trim board of this invention can use less than half of the cementitious material of a conventional trim board, but since it is reinforced with a rigid support member, it will be easier to work with and provide potentially greater durability. The cementitious layers of this invention can be joined to the rigid support member with mechanical and/or adhesive bonds, and the individual layers of the cementitious products of this invention can be further reinforced with rheological modifying agents to increase ILB strength by allowing fibers to displace and flow better across the laminated boundaries of the cementitious materials, or by adding mortar or cement bonding agents for adhesively bonding these layers together, or both. Although various embodiments have been illustrated, this is for the purpose of describing, and not limiting the invention. Various modifications, which will become apparent to one skilled in the art, are within the scope of this invention described in the attached claims.

What is claimed:

**1**. An exterior sheathing product comprising:
a board of fiber cement material attached to a first wall and a second wall of a support member;
the support member having a first nailing flange and fastener receiving holes through the first nailing flange;
the support member having a second nailing flange and further fastener receiving holes through the second nailing flange, wherein the first wall and the second wall are between the first nailing flange and the second nailing flange, and wherein the board is attached to and covers the first wall and the second wall, while the fastener receiving holes and the further fastener receiving holes are uncovered by the board to receive fasteners;
a cementitious bond promoter disposed on an exterior-facing side of said support member;
the board of fiber cement material including a multilayered sheet; and
an interlaminar bond strength promoter for adhesion between layers of the multilayered sheet.

**2**. The exterior sheathing product of claim **1**, comprising:
a shape cut into the board to provide a desired appearance.

**3**. The exterior sheathing product of claim **1**, comprising:
the first wall and the second wall being perforated with through-holes mechanically locking with the fiber cement material.

**4**. The exterior sheathing product of claim **1**, comprising:
the first wall and the second wall being perforated with through-holes mechanically locking with the fiber cement material; and
prongs adjacent to the through-holes, wherein the prongs are imbedded in the board.

**5**. The exterior sheathing product of claim **1**, comprising:
the first wall and the second wall comprising a mesh or scrim mechanically locking with the fiber-cement material.

**6**. The exterior sheathing product of claim **5** wherein,
the further fastener receiving holes are uncovered by the board to receive fasteners without development of cracks or over-stressed areas in the board.

**7**. The exterior sheathing product of claim **5**, comprising:
a shape cut into the board to provide a desired appearance.

**8**. The exterior sheathing product of claim **5**, comprising:
the first wall and the second wall being perforated with through-holes mechanically locking with the fiber cement material.

**9**. The exterior sheathing product of claim **5**, comprising:
the first wall and the second wall being perforated with through-holes mechanically locking with the fiber cement material; and